

Work Order ID 88647

July-30-12 10:17:23 AM

88647

Page 1

Item ID: D3914-7

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Rib

Start Date: 27/07/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 10/08/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

D3914

B

100

0.00

100

Large Fab

Memo

0.00

Large Fab

1- Cut tube as per dwg D3914
2- debur and remove identification markings

4 *SM* 12.08.29

110

QC6- Inspect dimensions to drawing

0.00

110

QC

Memo

0.00

Quality Control

4 *SM* 12.08.30

120

Identify as per dwg & Stock Location: _____

0.00

120

Packaging

Memo

0.00

Packaging

4 *SM* 12.08.30

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|--|------|------|---|---|-------------------|---|-------------|--------------|--|--|---|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Work Order ID 88647

88647

Page 2

July-30-12 10:17:23 AM

Item ID: D3914-7

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Rib

Start Date: 27/07/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 10/08/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.00

Quality Control

ML5 12/08/130
ML5 12/08/130

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|--|------|------|--|---|----------------------|---|----------------|--------------|---|--|--|
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| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged. <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | | |

Picklist Print

July-30-12 10:17:27 AM

Page 1

Work Order ID: 88647

88647

Parent Item: D3914-7

D3914-7

Parent Item Name: Rib

Start Date: 27/07/2012

Required Date: 10/08/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A new issue DD 10.03.19 verified by:EC IPP Rev:B as
per dwg revB DD 10.08.18 verified by:EC IPP Rev:C 11.01.18 chg
qc5 to 6 DD verf:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304TS0.500W.049 | | Purchased | No | | | 100 | f | 1,049.099 | 7.875 | 33.15789 | | | |

M304TS0 500W 049

Square Tubing

**

SAD 12-08-29

| Location | Loc Qty | Loc Code |
|----------|-------------|----------|
| MAT018 | 644 | |
| 122413 | 644 | |
| MAT034 | 405.0995823 | |
| 118460 | 0.00001534 | |
| 121328 | 2.059994 | |
| 121565 | 20.775743 | |
| 121808 | 382.26383 | |

33.1579

NCR: Yes / No

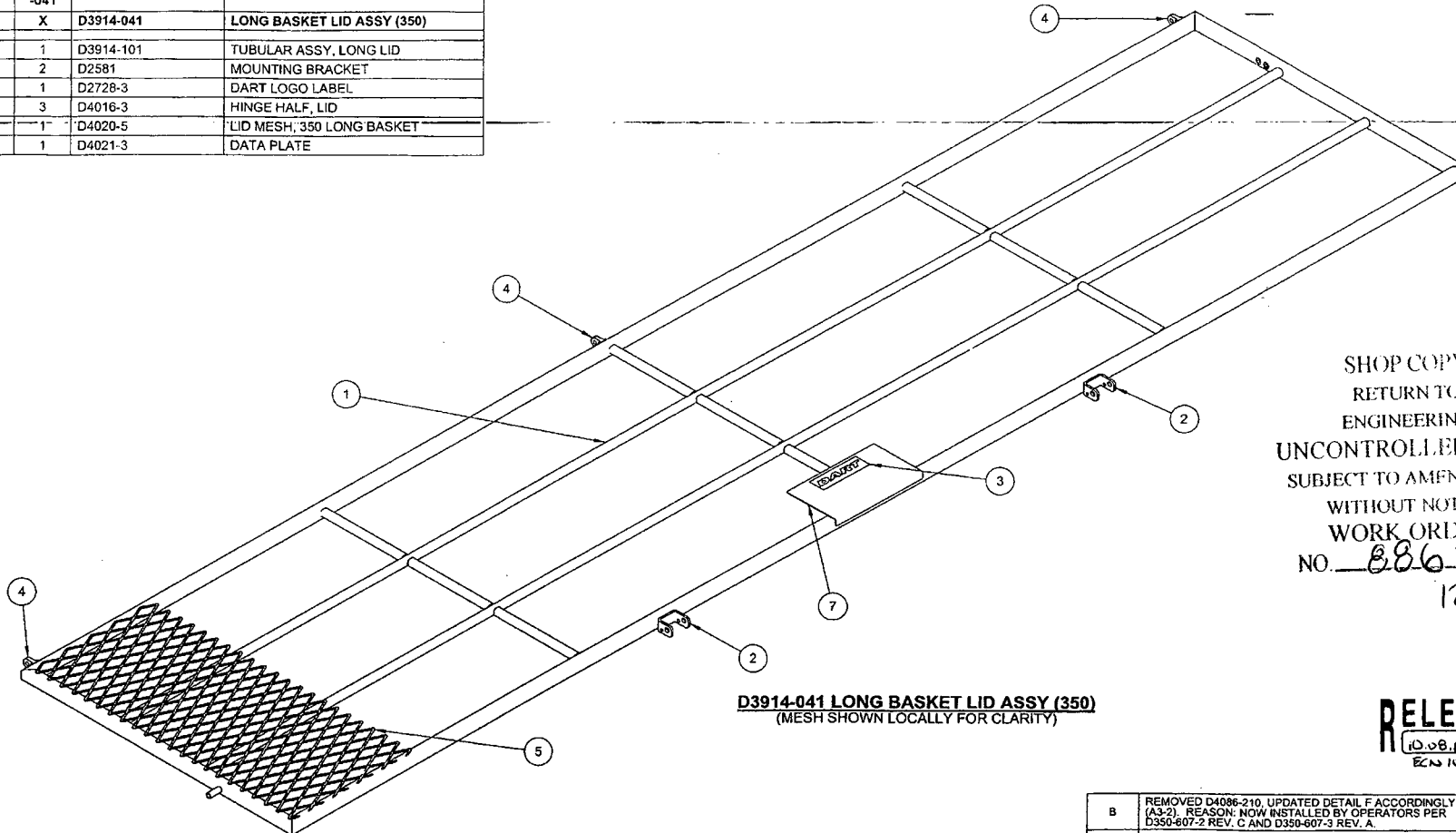
WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|--|------|------|---|---|----------------------|---|----------------|--------------|---|--|--|
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| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | | |

| ITEM | QTY | P/N | DESCRIPTION |
|------|-----|-----------|----------------------------|
| | X | D3914-041 | LONG BASKET LID ASSY (350) |
| 1 | 1 | D3914-101 | TUBULAR ASSY, LONG LID |
| 2 | 2 | D2581 | MOUNTING BRACKET |
| 3 | 1 | D2728-3 | DART LOGO LABEL |
| 4 | 3 | D4016-3 | HINGE HALF, LID |
| 6 | 1 | D4020-5 | LID MESH, 350 LONG BASKET |
| 7 | 1 | D4021-3 | DATA PLATE |



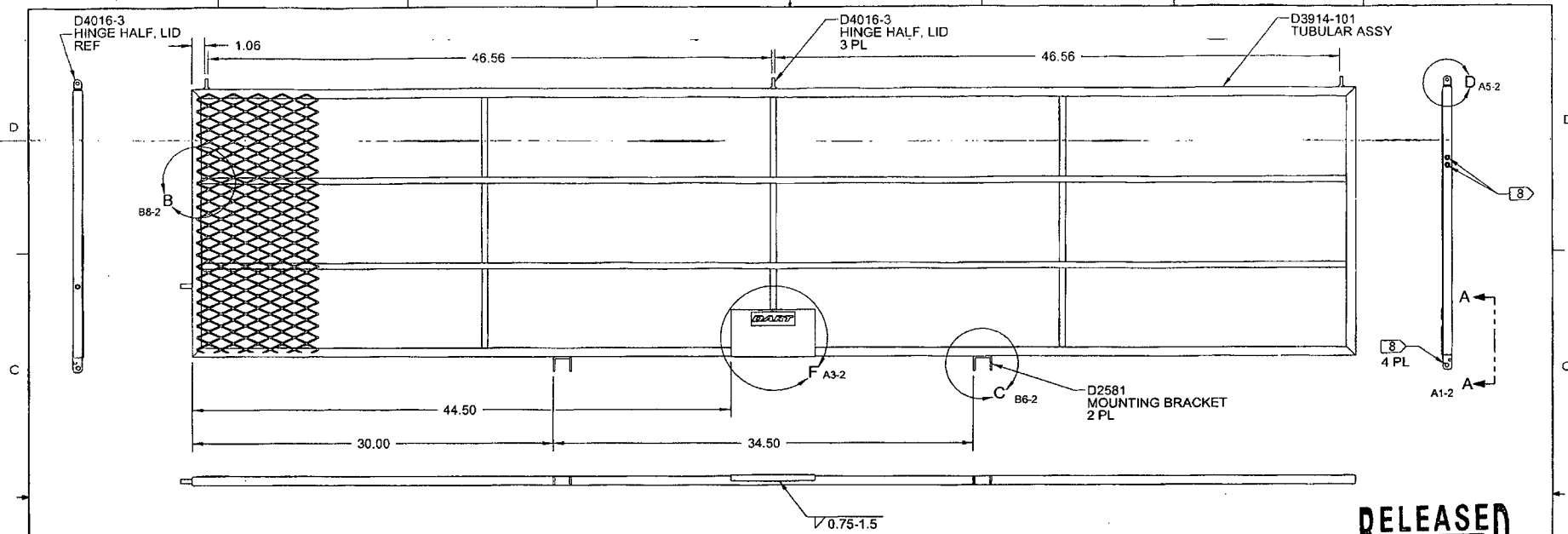
D3914-041 LONG BASKET LID ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 88647 MW
12/07/30

RELEASED
10.08.17 CP
ECN 10-596

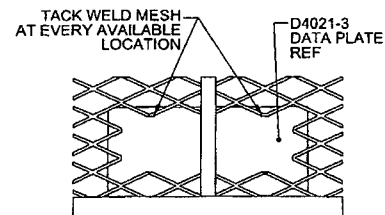
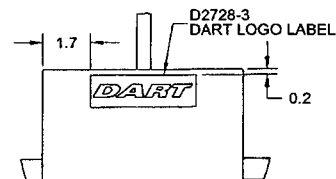
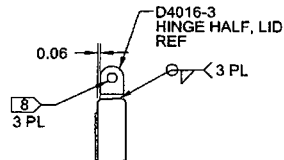
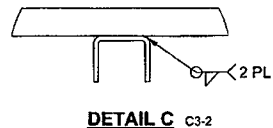
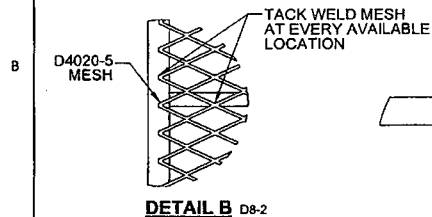
| | | | |
|------------|---|---|--------------|
| B | REMOVED D4086-210, UPDATED DETAIL F ACCORDINGLY (A3-2). REASON: NOW INSTALLED BY OPERATORS PER D350-607-2 REV. C AND D350-607-3 REV. A. | MB | 10.08.05 |
| A | NEW ISSUE | JPH | 10.03.16 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | ALS | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | SC | | |
| CHECKED | SC | DRAWING NO. | REV. B |
| MFG. APPR. | SC | D3914 | SHEET 1 OF 4 |
| APPROVED | SC | TITLE | SCALE |
| DE APPR. | SC | LONG BASKET LID ASSY (350) | NTS |
| DATE | 10.08.05 | COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON OR WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | |

88647



D3914-041 LONG BASKET LID ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

RELEASED
10.08.12 up



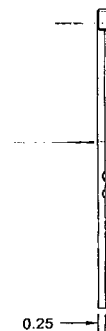
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PAINT TO OUTSIDE SURFACE OF MESH PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 22.35 lbs APPROX
- 8) MASK HOLES PRIOR TO FINISHING
- 9) WELD PER DART QSI 004

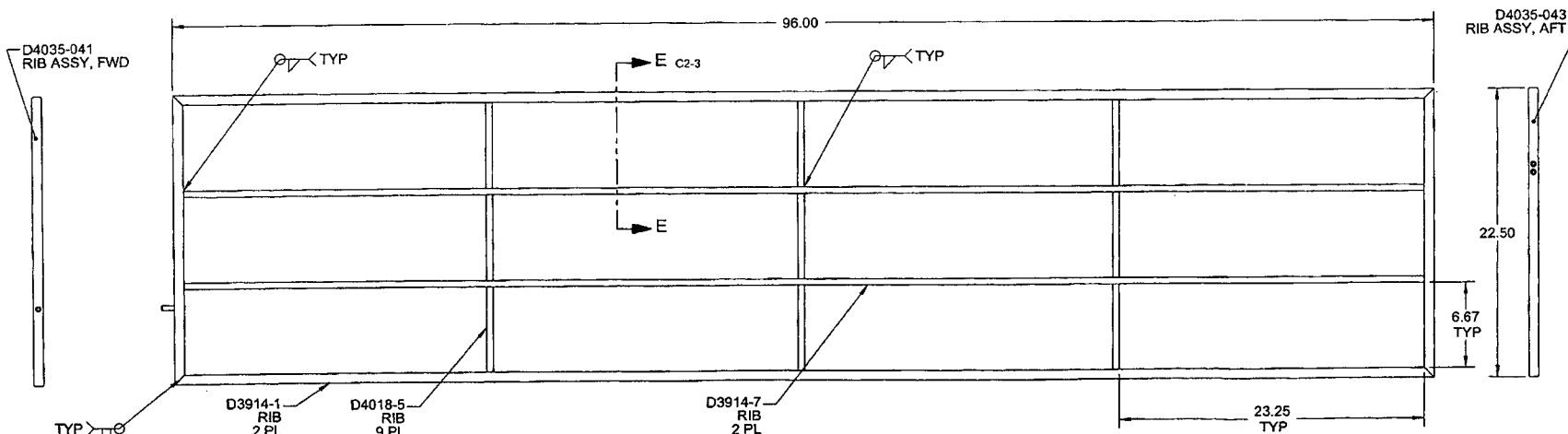
| | | | |
|------------|----------|--|--------------|
| DESIGN | ALS | DART AEROSPACE LTD | |
| DRAWN | Sc | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | Sc | DRAWING NO. | REV. B |
| MFG. APPR. | Sc | D3914 | SHEET 2 OF 4 |
| APPROVED | Sc | TITLE | SCALE |
| DE APPR. | Sc | LONG BASKET LID ASSY (350) NTS | |
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28647

| ITEM | QTY -101 | P/N | DESCRIPTION |
|------|-------------|-----------|------------------------------|
| | X | D3914-101 | TUBULAR ASSY, LONG LID (350) |
| 1 | 2 | D3914-1 | RIB |
| 2 | 2 | D3914-7 | RIB |
| 3 | 9 | D4018-5 | RIB |
| 4 | 1 | D4035-041 | BASKET LID RIB ASSY, FWD |
| 5 | 1 | D4035-043 | BASKET LID RIB ASSY, AFT |



SECTION E-E C5-3



8 D3914-101 TUBULAR ASSY, LONG LID

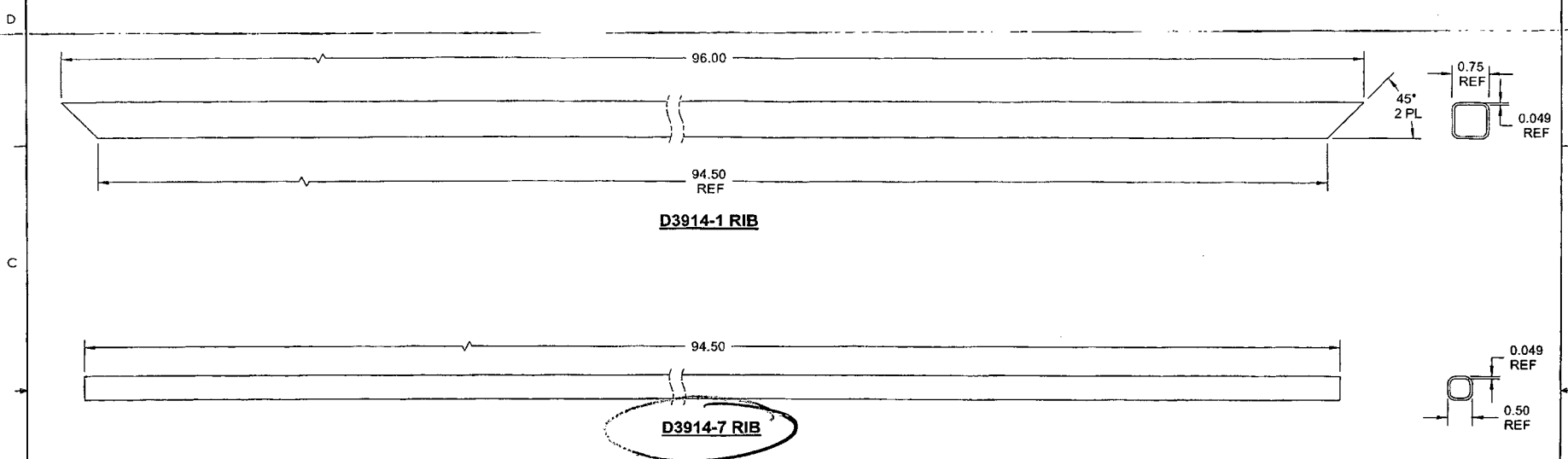
RELEASED
10-08-12

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 14.10 lbs
- 8) TOLERANCE FOR XX.XX DIMENSIONS ± 0.06 FOR D4018-101
- 9) WELD PER DART QSI 004

| | | | |
|------------|----------|--|--------------|
| DESIGN | ALS | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | BC | DRAWING NO. D3914 | REV. B |
| CHECKED | WJ | SHEET 3 OF 4 | |
| MFG. APPR. | | TITLE LONG BASKET LID ASSY (350) | SCALE NTS |
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| DE APPR. | | | |
| DATE | 10.08.05 | | |

88647



NOTES:

1) MATERIAL -1: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
REF DART SPEC. M304TS0.750W.049

-7: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
REF DART SPEC. M304TS0.500W.049

- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS

RELEASED
10.08.17.07

| | | | |
|------------|----------|---|--------------|
| DESIGN | ALS | DART AEROSPACE LTD | |
| DRAWN | SC | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | SC | DRAWING NO. | REV. B |
| MFG. APPR. | SC | D3914 | SHEET 4 OF 4 |
| APPROVED | SC | TITLE | SCALE |
| DE APPR. | SC | LONG BASKET LID ASSY (350) | NTS |
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